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The Mineral Industry of Romania

UNITED STATES DEPARTMENT OF THE INTERIOR

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The Mineral Industry of Romania

By Walter G. Steblez[1]

In 1987, Romania's mineral industry continued to produce modest amounts of bauxite, copper, iron, lead, manganese, and zinc ores. However, the production costs of these commodities continued to escalate owing to depletion of higher grade reserves and expanded production of lower rank ores. To an increasing degree, Romania has had to import these commodities for its industrial needs. The output of petroleum also remained on a declining trend because of dwindling reserves. The country, once among the leading world petroleum producers, had to import substantial amounts of crude petroleum to meet the needs of its refineries. In 1987, Romania's centrally planned economy continued to be affected by shortfalls in industrial production and growth in national income. The planned growth of industrial production fell short by 3.9%; that of national income by about 3.7%. During 1987, major capital outlays continued for development of the Rosia Poieni copper-molybdenum mining and beneficiation complex and the Cernavoda nuclear powerplant. In midyear, Petromar, Romania's offshore petroleum exploration company, claimed the startup of petroleum production in the Black Sea.

Government Policies and Programs.—The rapid repayment of Romania's convertible currency foreign debt remained the central Government economic policy in 1987. To meet this objective, Romania carried out a program of import reduction from 1981 to 1987, while accelerating exports of all goods and commodities marketable on a hard-currency basis. Steel semimanufactures allegedly were sold below production costs. Also, exports of agricultural goods, despite the needs for domestic consumption, resulted in food shortages that contributed to dislocations in the industrial sector. Although Romania claimed to be a leading world producer and exporter of mining equipment, the country's mining industry was perennially short of spare parts for its capital equipment. Mining enterprises were often supplied with spare parts that could not be used in repair and maintenance, and stockpiles of these materials overcrowded the industry's storage facilities.[2] As in other centrally planned economy countries, Romania set centrally planned production targets in terms of gross weight output indicators that often resulted in the production of goods that were not always suited to the needs of the consumer.[3] Specific targets were not provided in Romania's central economic plan for 1988 for industrial durables, fossil fuels, iron and steel, and nonferrous metals.[4] Instead, the plan focused on the need to reduce industry's consumption of fuels and minerals and to raise the output of crude petroleum, surface-mined coal, lignite, nonferrous ores, and coal-generated electrical power. The plan also stressed the need to increase the output of goods earmarked for export.

As in earlier years, the 1988 planned targets for growth of national income and industrial production were unrealistically high and, compared with those of 1987, were to grow by 9.5% and 11.5%, respectively.

PRODUCTION

Romania's mineral industry was state-owned and operated. Wages and prices continued to be set administratively, and market values were used only to determine hard-currency export prices for mineral and fuel commodities. Apart from shortages of spare parts in the mining and processing sectors, production declines for many mineral commodities were attributable to severe fuel and energy shortages owing to drought, which resulted in hydroelectric power reductions and a decline in domestic petroleum production.

Table 1.—Romania: Production of mineral commodities[1]

(Metric tons unless otherwise specified)

Commodity[2]	1983	1984	1985	1986[p]	1987[e]
METALS					
Aluminum:					
Bauxite, gross weight[e]	650,000	620,000	600,000	600,000	600,000
Alumina, calcined, gross weight	512,000	552,000	548,000	555,000	500,000
Ingot, including alloys:					
Primary	223,000	244,000	247,000	235,000	250,000
Secondary	21,000	20,000	18,000	16,000	15,000
Total	244,000	264,000	265,000	269,000	265,000
Bismuth, mine output, Bi content[e]	80	80	80	80	80
Cadmium, smelter[e]	80	75	75	75	75
Copper:[e]					
Mine output, Cu content	27,000	25,000	26,000	27,000	26,000
Smelter:					
Primary	34,000	32,000	[3]32,963	32,000	30,000
Secondary	6,000	6,000	7,000	7,000	8,000
Total	40,000	38,000	39,963	39,000	38,000
Refined, primary and secondary[e]	47,000	45,000	46,000	43,000	42,000
Gold, mine output, Au content[e] troy ounces	65,000	65,000	65,000	60,000	60,000
Iron and steel:					
Iron ore:					
Gross weight thousand tons	1,987	1,916	2,287	2,431	2,400
Content (26% Fe) do	517	498	595	632	624
Metal:					
Pig iron do	8,190	9,557	9,212	9,329	9,200
Steel, crude do	12,593	14,437	13,975	14,276	14,000
Ferroalloys:[e]					
Ferrochromium	42,000	45,000	44,000	44,000	42,000
Ferromanganese	80,000	87,000	80,000	82,000	81,000
Ferrosilicon	48,000	52,000	50,000	51,000	50,000
Silicomanganese	38,000	41,000	39,000	40,000	39,000
Silicon metal	3,800	4,100	3,800	4,500	4,500
Semimanufactures:					
Castings and forgings, finished[e] thousand tons	1,100	1,200	1,200	1,300	1,400
Pipes and tubes do	1,411	1,507	1,513	1,565	1,600
Rolled products do	9,179	10,329	9,900	10,207	11,300
Lead:					
Mine output, Pb content[e]	30,000	30,000	30,000	28,000	28,000
Metal, smelter:					
Primary[e]	40,000	35,900	38,600	[r]35,000	35,000
Secondary[e]	[3]9,298	10,000	10,000	[r]16,500	14,000
Total	49,298	45,900	48,600	51,500	49,000
Manganese:[4]					
Ore, gross weight[e] thousand tons	312	264	250	25[r]	250
Concentrate:					
Gross weight do	78	66	68	67	68
Mn content[e] do	23	20	19	19	19
Silver, mine output, Ag content[e] thousand troy ounces	820	810	810	800	750
Zinc:[e]					
Mine output, Zn content	45,000	44,000	43,000	43,000	41,000
Metal, smelter, primary and secondary	42,000	41,000	40,000	39,000	37,000
INDUSTRIAL MINERALS					
Barite[e]	78,000	75,000	75,000	75,000	72,000
Cement, hydraulic thousand tons	13,968	14,016	12,238	14,216	14,300

See footnotes at end of table.

Table 1.—Romania: Production of mineral commodities[1] —Continued

(Metric tons unless otherwise specified)

Commodity[2]		1983	1984	1985	1986[p]	1987[e]
INDUSTRIAL MINERALS —Continued						
Clays:[e]						
Bentonite		177,000	180,000	180,000	185,000	180,000
Kaolin		410,000	410,000	410,000	410,000	400,000
Diatomite[e]		290,000	300,000	290,000	300,000	280,000
Feldspar[e]		85,000	85,000	86,000	86,000	82,000
Fluorspar[e]		20,000	20,000	20,000	20,000	18,000
Graphite[e]		12,500	12,500	12,000	12,000	12,000
Gypsum[e]		1,630	1,650	1,620	1,600	1,600
Lime	thousand tons	3,623	3,848	3,717	3,959	4,000
Nitrogen: N content of ammonia	do	2,727	2,861	2,880	3,041	3,000
Pyrites, gross weight[e]	do	930	930	930	900	900
Salt:						
Rock	do	1,838	1,874	[e]1,900	[e]2,000	2,000
Other	do	2,758	3,000	[e]3,119	3,355	3,400
Total	do	4,596	4,874	5,019	5,355	5,400
Sand[e]	do	2,500	2,500	2,500	2,500	2,500
Sodium compounds, n.e.s.:						
Caustic soda	do	745	805	814	846	850
Sodium carbonate, manufactured, 100% Na_2CO_3 basis	do	788	912	836	895	890
Sulfur:[e]						
S content of pyrites	do	200	200	200	150	150
Byproduct, all sources	do	150	150	150	140	130
Total	do	350	350	350	290	280
Sulfuric acid	do	1,941	1,915	1,835	1,971	2,000
Talc[e]		65,000	66,000	65,000	64,000	60,000
MINERAL FUELS AND RELATED MATERIALS						
Carbon black		101,166	106,900	108,593	105,802	106,000
Coal:						
Run-of-mine:						
Anthracite and bituminous	thousand tons	10,629	10,653	10,472	11,074	11,900
Brown	do	773	827	834	858	900
Lignite	do	37,357	36,319	38,513	39,400	40,000
Total	do	48,759	47,799	49,819	51,332	51,900
Washed (produced from above):						
Anthracite and bituminous:						
For coke and semicoke production	do	2,618	2,903	2,963	3,276	3,300
For other uses	do	5,175	5,555	5,694	5,420	5,500
Brown	do	731	782	784	810	800
Lignite	do	35,998	37,040	37,140	38,012	38,000
Total	do	44,522	44,280	46,581	47,518	47,600
Coke:						
Metallurgical	do	4,268	4,849	4,743	5,088	5,100
Other	do	[e]450	[e]450	439	582	550
Total	do	4,718	5,299	5,182	5,670	5,650
Fuel briquets (from brown coal)[e]	do	750	750	750	750	750
Gas, natural:						
Gross:						
Associated	million cubic feet	366,813	387,437	413,464	445,247	400,000
Nonassociated	do	978,888	991,743	960,417	945,126	945,000
Total	do	1,345,701	1,379,180	1,373,881	1,390,373	1,345,000
Marketed[e]	do	1,100,000	1,127,000	1,126,000	1,120,000	1,120,000
Petroleum:						
Crude:						
As reported	thousand tons	11,593	11,453	10,718	10,125	10,000
Converted	thousand 42-gallon barrels	87,643	86,585	81,028	76,545	75,000
Refinery products[e]	do	[r]161,760	[r]167,300	[r]169,300	185,500	184,000

[e]Estimated. [p]Preliminary. [r]Revised.

[1]Includes data available through Sept. 16, 1988.

[2]In addition to the commodities listed, antimony, asbestos, and a variety of crude construction materials are produced, but output is not reported quantitatively, and available information is inadequate to make reliable estimates of output levels.

[3]Reported figure.

[4]Estimated series were based on published data on concentrate production.

TRADE

Despite failure to meet the planned foreign trade turnover for 1987, Romania reported a $2.8 million hard-currency surplus with market economy countries. Although Romania continued to barter trade extensively with developing and several developed market economy countries to obtain badly needed iron and nonferrous ores, commercial relations with the Council for Mutual Economic Assistance (CMEA) remained the cornerstone of the country's mineral trade. Within the CMEA, the Soviet Union played a dominant role in supplying Romania with fuels and mineral commodities. In 1987, about 30% of Romania's trade was with the U.S.S.R. During the year, the U.S.S.R. supplied Romania with 2.5 million tons of bituminous coal, 4.7 million tons of crude petroleum, over 138,000 tons of ferroalloys, 4.8 million tons of iron ore, 3.4 million tons of iron ore pellets, 115 billion cubic feet of natural gas, about 400,000 tons of rolled iron and steel, and over 200,000 tons of potash-based fertilizer.[8] To help pay for these deliveries, Romania participated in mining and oil and gas development projects in the U.S.S.R., mainly by providing labor and oilfield equipment. Commercial exchanges with the U.S.S.R. for the 1986-90 period were planned to grow by 65%, compared with the 1981-85 5-year plan. Romania was to continue to participate in mineral and mineral fuel development projects in the Soviet Union in exchange for raw materials. Romania's mineral trade with the United States was largely limited to Romanian imports of bituminous coal and exports of petroleum products.

Table 2.—Romania: Apparent exports of mineral commodities[1]

(Metric tons unless otherwise specified)

Commodity	1985	1986[p]	Destinations, 1986	
			United States	Other (principal)
METALS				
Aluminum:				
Oxides and hydroxides	--	60	--	All to Italy.
Ash and residue containing aluminum	--	10	--	All to Spain.
Metal including alloys:				
Scrap	2,742	2,184	--	Italy 2,054; West Germany 79; Spain 51.
Unwrought	[3]139,100	116,727	15,927	Italy 22,929; France 17,280.
Semimanufactures	8,220	16,713	6,343	Japan 6,140; France 1,839.
Chromium: Oxides and hydroxides	204	349	240	France 39; Japan 34.
Copper:				
Matte and speiss including cement copper	--	18	--	All to Greece.
Metal including alloys:				
Scrap	--	237	--	All to West Germany.
Unwrought	77	18	--	All to Italy.
Semimanufactures	39	27	2	West Germany 19; France 6.
Gold:				
Waste and sweepings, value, thousands	$137	$12	--	All to West Germany.
Metal including alloys, unwrought and partly wrought, do.	$14	$13	--	Do.
Iron and steel: Metal:				
Scrap	173	68	--	Austria 59; Yugoslavia 9.
Pig iron, cast iron, related materials	418	440	--	West Germany 420; Italy 20.
Ferroalloys:				
Ferrochromium	--	811	--	All to Netherlands.
Ferromanganese	1,000	6,000	--	NA.
Ferrosilicomanganese	5,602	781	--	West Germany 581; Netherlands 200.
Ferrosilicon	--	256	--	Netherlands 181; West Germany 75.
Unspecified	6,099	75	--	All to France.
Steel, primary forms	84,182	69,458	--	Yugoslavia 43,046; United Kingdom 13,510; Japan 6,984.

See footnotes at end of table.

Table 2.—Romania: Apparent exports of mineral commodities[1] —Continued

(Metric tons unless otherwise specified)

Commodity	1985	1986[p]	Destinations, 1986: United States	Destinations, 1986: Other (principal)
METALS —Continued				
Iron and steel: Metal —Continued				
Semimanufactures:				
Bars, rods, angles, shapes, sections thousand tons	1,498	1,409	—	Poland 81; West Germany 70; unspecified 1,139.
Universals, plates, sheets do	872	1,052	60	Japan 153; West Germny 60; unspecified 619.
Hoop and strip do	1	[3]	—	Mainly to Finland.
Rails and accessories do	[3]	1	—	All to Greece.
Wire do	95	96	—	West Germany 5; Yugoslavia 1; unspecified 88.
Tubes, pipes, fittings do	[2]410	503	22	Poland 103; West Germany 10; unspecified 337.
Castings and forgings, rough do	6	4	[3]	West Germany 3.
Lithium: Oxides and hydroxides	73	—	—	—
Magnesium: Metal including alloys, semimanufactures	—	62	—	All to United Kingdom.
Nickel: Metal including alloys:				
Unwrought	—	21	—	All to Austria.
Semimanufactures	3	1	—	All to Italy.
Platinum-group metals: Waste and sweepings value, thousands	—	$78	—	West Germany $41; Italy $37.
Silver:				
Waste and sweepings do	$14	—	—	—
Metal including alloys, unwrought and partly wrought do	$564	$1,103	—	United Kingdom $714; Yugoslavia $376; West Germany $13.
Tin: Oxides	18	—	—	—
Tungsten:				
Ore and concentrate	—	2	—	All to Denmark.
Metal including alloys, all forms	1	8	—	All to West Germany.
Zinc: Metal including alloys:				
Unwrought	150	50	—	Do.
Semimanufactures	—	39	—	All to Morocco.
Other:				
Ashes and residues	58	87	—	Italy 46; United Kingdom 41.
Base metals including alloys, all forms	[2]14,661	6,132	—	All to Poland.
INDUSTRIAL MINERALS				
Abrasives, n.e.s.:				
Natural: Corundum, emery, pumice, etc	18	—	—	—
Artificial: Corundum	76	220	—	All to West Germany.
Dust and powder of precious and semiprecious stones including diamond value, thousands	$999	$560	$235	Belgium-Luxembourg $314; West Germany $10.
Grinding and polishing wheels and stones	1	38	—	All to France.
Barite and witherite	220	440	—	Do.
Boron materials: Oxides and acids	99	50	—	All to Italy.
Cement thousand tons	[2]2,477	146	—	Hungary 135; Norway 6; United Kingdom 3.
Clays, crude:				
Kaolin	—	18	—	All to Italy.
Unspecified	6	150	—	Do.
Diamond:				
Gem, not set or strung value, thousands	$3	—	—	—
Industrial stones do	$84	$975	—	All to Belgium-Luxembourg.
Fertilizer materials: Manufactured:				
Ammonia thousand tons	12	4	—	Yugoslavia 3.
Nitrogenous do	[2]1,347	1,204	536	West Germany 169; France 116.
Phosphatic do	33	108	—	U.S.S.R. 86; Yugoslavia 21.
Unspecified and mixed do	[2]3,294	262	—	Thailand 81; Denmark 72; Yugoslavia 27.
Gypsum and plaster	12,225	12,283	—	All to Hungary.
Lime	31,965	—	—	—
Phosphorus, elemental	—	159	—	Italy 109; Switzerland 70.
Pigment, mineral:				
Natural, crude	—	2	—	All to Denmark.
Iron oxides and hydroxides, processed	—	5	—	All to Greece.

See footnotes at end of table.

Table 2.—Romania: Apparent exports of mineral commodities[1] —Continued

(Metric tons unless otherwise specified)

Commodity	1985	1986[p]	Destinations, 1986	
			United States	Other (principal)
INDUSTRIAL MINERALS —Continued				
Precious and semiprecious stones other than diamond, synthetic: value, thousands	$53	$14	--	All to Belgium-Luxembourg.
Salt and brine	671,749	702,455	--	Hungary 464,345; Yugoslavia 238,110.
Sodium compounds, n.e.s.: Carbonate, manufactured	[2]471,800	[r]78,814	--	Hungary 49,137; Yugoslavia 45,861; Thailand 33,400.
Stone, sand and gravel:				
Dimension stone:				
Crude and partly worked	11	108	--	Hungary 43; Italy 34; Switzerland 31.
Worked	11,310	18,899	--	West Germany 18,161; Switzerland 518; Austria 212.
Sand other than metal-bearing	159	2	--	All to Jordan.
Other: Crude		775	--	All to West Germany.
MINERAL FUELS AND RELATED MATERIALS				
Carbon black	[2]21,000	5,780	--	Czechoslovakia 2,670; Bulgaria 2,100; Yugoslavia 743.
Coal: Anthracite and bituminous	--	15	--	All to Greece.
Gas, natural: Gaseous: million cubic feet	--	2	--	All to Hungary.
Peat including briquets and litter	--	404	--	Austria 299; Italy 84; France 21.
Petroleum:				
Crude: thousand 42-gallon barrels	--	415	394	Netherlands 21.
Refinery products:				
Liquefied petroleum gas: do	704			
Gasoline: do	[2]33,150	14,572	8,882	West Germany 1,557; Spain 1,052.
Mineral jelly and wax: do	[2]16	7	--	Thailand 6.
Kerosene and jet fuel: do	27	127	--	West Germany 74; Belgium-Luxembourg 45; Hungary 8.
Distillate fuel oil: do	[2]20,664	27,004	957	Italy 13,374; France 6,964; West Germany 4,415.
Lubricants: do	[2]1,523	8,108	7,866	West Germany 112; Austria 101.
Residual fuel oil: do	[2]17,086	5,982	1,542	Italy 2,149; Sweden 716.
Bitumen and other residues: do	12	([3])	--	All to Switzerland.
Petroleum coke: do	[2]1,000	104	--	All to Italy.

[p]Preliminary. NA Not available.

[1]Table prepared by Jozef Plachy. Owing to a lack of official trade data published by Romania, this table should not be taken as a complete presentation of this country's mineral trade. Unless otherwise specified, these data have been compiled from United Nations information and data published by the trading partner countries.

[2]Official Trade Statistics of Romania.

[3]Less than 1/2 unit.

Table 3.—Romania: Apparent imports of mineral commodities[1]

(Metric tons unless otherwise specified)

Commodity	1985	1986[p]	Sources, 1986	
			United States	Other (principal)
METALS				
Aluminum:				
Ore and concentrate	274,564	260,518	--	Yugoslavia 225,646; Hungary 34,872.
Oxides and hydroxides	41,158	42,164	--	Yugoslavia 15,000; Hungary 11,755; Greece 10,000.
Metal including alloys:				
Unwrought	2,622	1,000	--	All from Hungary.
Semimanufactures	1,687	411	--	United Kingdom 215; Hungary 72; Austria 66.
Chromium:				
Ore and concentrate	[2]101,400	272	--	All from West Germany.
Oxides and hydroxides		6	--	All from United Kingdom.
Metal including alloys, all forms	110	45	--	Do.
Cobalt: Metal including alloys, all forms	31	15	--	United Kingdom 9; West Germany 6.

See footnotes at end of table.

Table 3.—Romania: Apparent imports of mineral commodities[1] —Continued

(Metric tons unless otherwise specified)

Commodity	1985	1986[p]	Sources, 1986	
			United States	Other (principal)
METALS —Continued				
Columbium and tantalum: Metal including alloys, all forms:				
Columbium (niobium)	--	1	--	All from West Germany.
Tantalum	--	1	1	
Copper:				
Oxides and hydroxides	25	--		
Metal including alloys:				
Scrap	5,364	6,537	--	All from Chile.
Unwrought	8,860	1,000	--	All from Spain.
Semimanufactures	7,761	6,576	--	Poland 5,845; West Germany 406; Italy 119.
Gold: Metal including alloys, unwrought and partly wrought				
value, thousands	$151	$306	--	Switzerland $265; West Germany $39; Japan $2.
Iron and steel:				
Iron ore and concentrate excluding roasted pyrite thousand tons	[2]15,207	9,063	--	All from U.S.S.R.
Metal:				
Scrap	12	7	--	All from France.
Pig iron, cast iron, related materials	[3]117,400	100,000	--	NA.
Ferroalloys:				
Ferrochromium	711	587	--	Italy 358; Yugoslavia 120; West Germany 109.
Ferromanganese	37,000	60,000	--	NA.
Ferromolybdenum	20	--		
Ferrosilicomanganese	20,195	19,979	--	All from U.S.S.R.
Silicon metal	185	--		
Unspecified	[3]87,034	81,434	--	NA.
Steel, primary forms	281,000	309,000	--	NA.
Semimanufactures:				
Bars, rods, angles, shapes, sections thousand tons	249	221	[r]	Czechoslovakia 15; Hungary 14; unspecified 188.
Universals, plates, sheets do.	108	113	--	Bulgaria 19; Portugal 9; unspecified 56.
Hoop and strip do.	9	7	[r]	West Germany 5; Hungary 1.
Rails and accessories do.	100	85	--	NA.
Wire do.	9	7	--	West Germany 1; Yugoslavia 1; unspecified 5.
Tubes, pipes, fittings do.	[3]44	33	--	Japan 2; West Germany 1; unspecified 26.
Castings and forgings, rough do.	1	1	[r]	NA.
Lead:				
Ore and concentrate	12,709	7,829	--	Spain 4,993; Ireland 2,486; Yugoslavia 350.
Oxides	1,135	491	--	Italy 471; France 20.
Metal including alloys, unwrought	5,320	--		
Magnesium: Metal including alloys, semimanufactures	53	45	--	West Germany 30; France 15.
Manganese:				
Ore and concentrate, metallurgical-grade	225,000	196,000	--	NA.
Metal including alloys, all forms	31	--		
Mercury 76-pound flasks	493	87	--	All from Netherlands.
Molybdenum:				
Ore and concentrate	--	24	--	All from West Germany.
Metal including alloys, all forms	3	1	--	All from France.
Nickel:				
Matte and speiss, Ni content	351	--		
Metal including alloys:				
Scrap	10	--		
Unwrought	[3]10,900	64	--	Finland 50; United Kingdom 14.
Semimanufactures	228	175	--	West Germany 110; Italy 29; United Kingdom 21.
Platinum-group metals: Metals including alloys, unwrought and partly wrought				
value, thousands	$625	$2,238	--	United Kingdom $2,140; Switzerland $66; France $26.

See footnotes at end of table.

Table 3.—Romania: Apparent imports of mineral commodities[1] —Continued

(Metric tons unless otherwise specified)

Commodity	1985	1986[p]	Sources, 1986: United States	Sources, 1986: Other (principal)
METALS—Continued				
Silver: Metal including alloys, unwrought and partly wrought do.	$159	$138		West Germany $74; Switzerland $40; United Kingdom $24.
Tin: Oxides	17			
Titanium:				
Ore and concentrate	6,425	4,975		All from Netherlands.
Oxides	1,559	892		West Germany 687; France 110; United Kingdom 91.
Metal including alloys, all forms	9	10		United Kingdom 7; France 1; Italy 1.
Tungsten:				
Oxides and hydroxides		50		France 30; West Germany 20.
Metal including alloys, all forms	74	29		West Germany 13; France 5; Portugal 1.
Zinc:				
Ore and concentrate	1,880	7,700		All from Spain.
Oxides	5,186	3,746		France 3,202; Yugoslavia 544.
Blue powder	NA	435		West Germany 260; France 175.
Metal including alloys:				
Unwrought		2,444		All from Poland.
Semimanufactures	403	107		Poland 104; Switzerland 2; Italy 1.
Zirconium:				
Ore and concentrate	808	595		All from West Germany.
Metal including alloys, all forms	1			
Other:				
Ores and concentrates	4			
Oxides and hydroxides	18	64		West Germany 62; Netherlands 2.
Base metals including alloys, all forms	109	105	(3)	West Germany 93; Sweden 7; Austria 5.
INDUSTRIAL MINERALS				
Abrasives, n.e.s.:				
Natural: Corundum, emery, pumice, etc.		40		All from Greece.
Artificial: Corundum	9,043	1,693		Yugoslavia 4,831; Hungary 4,612; Japan 1,200.
Dust and powder of precious and semiprecious stones including diamond value, thousands	$228	$39		United Kingdom $20; Belgium-Luxembourg $19.
Grinding and polishing wheels and stones	814	700	(3)	Italy 250; West Germany 122; Netherlands 75.
Asbestos, crude	733	1,152		Italy 1,096; Canada 54; Switzerland 2.
Barite and witherite	3,750	11,287		All from Yugoslavia.
Boron materials: Crude natural borates	19,000			
Cement	12	1		All from Italy.
Chalk		23		All from West Germany.
Clays, crude:				
Bentonite	16			
Kaolin	4,293	4,840		United Kingdom 4,818; West Germany 22.
Unspecified	29,812	350		All from West Germany.
Diamond:				
Gem, not set or strung: value, thousands	$49			
Industrial stones do.	$3,965	$4,032	$30	Belgium-Luxembourg $2,293; United Kingdom $1,709.
Diatomite and other infusorial earth	1,072	1,093		France 933; Iceland 93; Austria 64.
Fertilizer materials: Manufactured:				
Ammonia		1,306		All from Italy.
Nitrogenous	209	11		All from West Germany.
Potassic	r831,231	629,908		U.S.S.R. 397,700; East Germany 229,200; West Germany 6.
Unspecified and mixed		2,220		All from Italy.
Fluorspar	12,585	1,219		Italy 2,200; Spain 2,019.
Graphite, natural	65	26		All from West Germany.
Gypsum and plaster		20		All from United Kingdom.
Iodine		16		All from Belgium-Luxembourg.
Magnesium compounds	66,766	24,623		Czechoslovakia 24,000; Yugoslavia 594; France 85.

See footnotes at end of table.

Table 3.—Romania: Apparent imports of mineral commodities[1] —Continued

(Metric tons unless otherwise specified)

Commodity	1985	1986[p]	Sources, 1986: United States	Sources, 1986: Other (principal)
INDUSTRIAL MINERALS—Continued				
Mica:				
Crude including splittings and waste	—	30	—	All from Belgium-Luxembourg.
Worked (including agglomerated splittings)	9	7	—	France 5, Austria 1, Italy 1.
Phosphates, crude thousand tons	[2]2,464	1,315	91	Morocco 634, Jordan 590.
Phosphorus, elemental	1,625	1,578	—	All from U.S.S.R.
Pigments, mineral: Iron oxides and hydroxides, processed	335	95	—	All from Japan.
Precious and semiprecious stones other than diamond, synthetic:				
value, thousands	826	829	—	Japan 820; United Kingdom 86; Belgium-Luxembourg 83.
Pyrite, unroasted	70,284	—	—	—
Salt and brine	49	30	—	All from West Germany.
Stone, sand and gravel:				
Dimension stone:				
Crude and partly worked	—	30	—	Sweden 29; Italy 10.
Worked	89	24	—	France 23; West Germany 1.
Gravel and crushed rock	28[e]	159	—	France 114; Italy 19; Yugoslavia 17.
Quartz and quartzite	65	16	—	All from West Germany.
Sand other than metal-bearing	—	24	—	All from Netherlands.
Sulfur:				
Elemental:				
Crude including native and byproduct	[2]242,900	163,640	—	Poland 159,000; Greece 2,500; West Germany 2,140.
Colloidal, precipitated, sublimed	—	312	—	All from West Germany.
Dioxide	722	—	—	—
Sulfuric acid	7,193	2,715	—	Hungary 2,663; West Germany 51; Switzerland 1.
Talc, steatite, soapstone, pyrophyllite	334	—	—	—
Other:				
Crude	5,154	1,992	—	Italy 675; Greece 500; West Germany 452.
Slag and dross, not metal-bearing	—	38	—	France 24; Netherlands 14.
MINERAL FUELS AND RELATED MATERIAL:				
Asphalt and bitumen, natural	13	9	—	All from West Germany.
Carbon black	46	8	—	Netherlands 6; United Kingdom 2.
Coal: Anthracite and bituminous thousand tons	[3]6,049	4,082	1,908	Poland 1,740; Australia 883.
Coke and semicoke do.	[2]1,898	1,175	—	Japan 758; Poland 97; United Kingdom 76.
Gas, natural: Gaseous million cubic feet	[2]65	—	—	—
Petroleum:				
Crude thousand 42-gallon barrels	[2]106,770	426	—	All from Tunisia.
Refinery products:				
Gasoline 42-gallon barrels	96,884	94,121	—	Italy 93,653; West Germany 459; United Kingdom 9.
Mineral jelly and wax do.	86	3,101	—	Hungary 2,920; United Kingdom 126; Austria 31.
Kerosene and jet fuel do.	519	275,126	—	Italy 275,079; Yugoslavia 39; United Kingdom 8.
Distillate fuel oil do.	2,044	3,215	—	Austria 2,514; Greece 358; West Germany 343.
Lubricants do.	27,720	25,190	473	West Germany 10,619; Italy 10,241; United Kingdom 1,737.
Residual fuel oil do.	160	298,928	—	All from Italy.
Bituminous mixtures do.	—	61	—	All from Yugoslavia.
Petroleum coke do.	104,500	148,500	—	All from Japan.

[p]Preliminary. NA Not available.

[1]Table prepared by Jozef Plachy. Owing to a lack of official trade data published by Romania, this table should not be taken as a complete presentation of this country's mineral trade. Unless otherwise specified, these data have been compiled from United Nations information and data published by the trading partner countries.

[2]Official Trade Statistics of Romania.

[3]Less than 1/2 unit.

COMMODITY REVIEW

METALS

Copper.—Development of the Rosia Poieni copper mining and beneficiation complex in the Apuseni Mountains continued to be one of the main investment projects in the mineral industry. Construction of the concentrator was not completed during the year as planned. The project's startup was rescheduled for 1988. When fully operational, the complex would produce about 9 million tons of ore per year. At the Moldova Noua copper mine in the Caras-Severin District a domestically designed molybdenum recovery unit was reportedly put on-stream in September.

Iron and Steel.—The Iasi ironworks and steelworks announced the installation of a 16,500-ton-per-year welded tube mill. All of the equipment, including the automated control system, was domestically produced. The steelworks also introduced three new grades of steel designed chiefly for use in the manufacture of cast parts for mining equipment and rings for heavy bearings. At Hirsova, near Constanta, construction of a new steel cable and wire plant was started. The plant was designed to produce 25,000 tons per year of steel cable and 20,000 tons per year of wire, ranging from 0.2 to 1.0 millimeters in diameter.

Lead and Zinc.—Romania continued to mine low-grade lead and zinc ores in the Baia Mare area. Mine output of lead and zinc had been on a declining trend in recent years, requiring substantial imports of concentrates from abroad. Approximately 30,000 tons of zinc and 10,000 tons of lead concentrates were imported from Iran during the year. Concentrates were smelted at the Uxina Chimica Metalurgia Imperial Smelter in Copsa Mica.

INDUSTRIAL MINERALS

Romania's production of barite, bentonite, diatomite, feldspar, graphite, gypsum, kaolin, and limestone was sufficient to meet most domestic needs. Industrial minerals were mined throughout the country at about 60 deposits, the total production of which reportedly increased about sixfold from 1967 to 1987. During the 1986-90 5-year plan, new quartz and diatomite deposits were to be put into operation. Romania also produced synthetic diamonds at the Dacia synthetic diamond plant in Bucharest.

MINERAL FUELS

Coal.—A new longwall system was put into operation at the Motru-Vestmin Mine thereby adding 800 tons of output per day. Most of Romania's coal was substandard and caused extensive problems at coal-fired electric-power stations by clogging filters and damaging furnaces. The country continued to experience severe power shortages, especially during the winter months. In mid-1987, Romania negotiated with the government of Queensland, Australia, to enter into a long-term contract for the purchase of 3 million tons per year of Australian coking coal in exchange for steel products and equipment such as railway rolling stock.

Petroleum.—The chief event in an industry marked by rapidly declining production was the startup in May of Petromar's offshore "Gloria" platform. The petroleum was pumped through a 50-mile pipeline to the Midia Novodari refinery for processing. Romania was the first country to produce oil from the Black Sea shelf.

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[1]Foreign mineral specialist, Division of International Minerals.
[2]Scinteia. July 4, 1987, pp. 1-2; and July 25, 1987, pp. 1-3.
[3]———. Oct. 6, 1987, pp. 2, 5.
[4]———. Dec. 25, 1987, pp. 1-2.
[5]Vneshnyaya Torgovlya S.S.S.R. (The Foreign Trade of the U.S.S.R.) 1987, p. 167.

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